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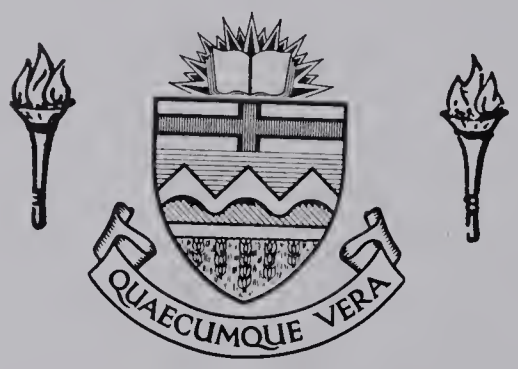

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SELF-CONCEPT AND BELIEFS OF EDUCATIONALLY RETARDED YOUTH

BY

(C) ROBERT PAUL SANCHE

A THESIS

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FACULTY OF GRADUATE STUDIES

The undersigned hereby certify that they have read and recommended to the Faculty of Graduate Studies for acceptance, a thesis entitled "Self-Concept and Beliefs of Educationally Retarded Youth" submitted by Robert Paul Sanche in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

This study was designed to determine whether or not changes occurred in self-concept and irrational beliefs of two groups of educationally retarded youth enrolled in special programs in four Saskatchewan cities. The experimental group (Sw) consisted of sixty-eight students enrolled in the Co-operative School-Work Training Program (C.S.W.T.P.) while the control group (So) consisted of sixty-five students enrolled in a "Vocational A" or junior vocational program which did not include work-training.

Data to test the hypotheses were gathered by administration of the S-C Scale (Lipsitt, 1958) and an abridgement of the I-I Inventory (Zingle, 1965). Additional data concerning socio-economic status were gathered by administration of the S-E Index (Elley, 1961). Cumulative records provided data with reference to age, individual intelligence quotient, number of grades previously failed, and sex.

Preliminary analysis of variance indicated that the Sw and So groups were similar with reference to socio-economic status of the family and number of grades previously failed. Multiple Linear Regression Analysis was then utilized to test the hypotheses. Post S-C and I-I Scores were criterion variables while age, intelligence quotient, pre S-C scores, pre I-I scores, and group membership were predictors.

Students in the Sw group had significantly higher self-concept scores following five months of experience in their program than did students in the So group. The Sw group had significantly fewer irrational beliefs following treatment than did the So group. These results were interpreted to mean that the C.S.W.T.P. is more effective than the "Vocational A" Program, for fostering positive personality development among educationally retarded youth.

Subsequent follow-up indicated that eight students dropped from the Sw group and six students dropped from the So group before the post-testing period in February. Drop-outs from both groups were younger and from lower socio-economic backgrounds than those who remained. Seven of eight who dropped from the Sw group were females. Only two of six who dropped from the So group were females. Sw drop-outs tended to have higher mean pre-test self-concept scores than did the total Sw group. So drop-outs tended to have lower mean pre-test self-concept scores than did the total So group.

Implications for future education planning and further research suggestions are noted.

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CHAPTER I

THE PROBLEM IN PERSPECTIVE

Special Educators in recent years have sought more efficient ways of assisting educationally retarded youth to a fuller social and vocational participation in our communities. Recently, the Co-operative School-Work Training Program, through part time schooling and part time work experience has been represented as one of the more successful vehicles for attaining these ends. The literature includes many subjective evaluations of the worth of such programs. There is a pressing need at this time for objective evidence to determine the effects of supervised work experience on the personalities and self-concepts of educationally retarded youth.

In 1965 the Saskatchewan Association for Retarded Children in co-operation with the Department of Education instituted, as a Centennial project, a Co-operative School-Work Training Program for Educable Mentally Retarded Youth. Primarily, the work portion of the program was intended to prepare such youth for a smoother transition from school into competitive employment and adult living. Personal traits such as punctuality, industry, and dependability were stressed as well as employee-employer and employee-customer relations. Learning of specific job skills was incidental to the program.

In the past two years the program has proven its worth

to such youth (Sigfusson, 1967; 1968). Indeed, the Department's manifest belief in the program is underscored in the fact that the Project Supervisor's position has been made permanent in the Guidance and Special Education Branch since August, 1967. School boards have indicated that the total number of youth being served by the program has doubled in the present year.

Regina is presently planning a new school for educationally retarded youth. Saskatoon established seven new classrooms within an existing facility (September, 1967). Ten Regional Comprehensive schools are being planned or constructed to include facilities for programs for the educationally retarded. Each school system seems to be taking a different approach to the nature and location of facilities, curricula, staffing, and extent of "work experience" to be provided for such students. The problem of orderly program development based on sound research remains of paramount importance.

Many reports may be found in the literature describing the positive results accruing to educationally retarded youth who have been served in part-time work experience programs (Kolstoe and Frey, 1965; Newhause, 1965; Peck, 1965; Peters and Rohde, 1964; Shawn, 1964). Only a minority of researchers doing follow-up studies have sought information beyond the fact that such youth have achieved "employed" status. Social psychologists such as Combs and Snygg (1959) and Rogers (1951) have suggested the possibility that successful work experience

could have much more global effects upon the personality and motivation of the individual. Studies reviewed in Chapter II of this paper document the importance of a positive self-concept to adequate human functioning both in school and in society. Baller, Charles and Miller (1967) in a thirty year follow-up study of former* mental retardates, have reported some of the more subtle results of successful work experience. The latter was one factor which distinguished those who became functionally normal from those who remained functionally retarded adults.

There has been a tremendous wastage of human potential in the past in our school programs for educationally retarded youth (Di Michael, 1966). Generally, special classes for these youngsters have been housed in elementary schools and the students virtually pushed out of school when they reached the age of sixteen years and could legally drop from school (Karnes, 1966). Some programs, however, such as that of Champaign, Illinois (Di Michael, 1966) have had remarkable success with educationally handicapped youth, bringing them through progressive developmental stages of work and study to a lasting, full employment in the adult world of work. In Saskatchewan where anticipated expansion will quickly

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*Former Mental Retardates--normally functioning adults who as children had been identified as educable retardates.

double the number of youth served by the Co-operative School-Work Training Program, the question of possible positive global effect which the "work-training" portion of the program might have on the self-concept of educationally retarded youth is important. The answer to this question may modify the future and direction of the Co-operative School-Work Training Program in Saskatchewan.

The Problem

The object of this study is to determine if there are significant positive changes in self-concept and beliefs of two groups of educationally retarded youth. One group enrolled in the Co-operative School-Work Training Program (Sw) spent part time in employment and part time in school, while the other group enrolled in the first year of a "Vocational A" or Junior Vocational Program (So) pursued a special program which did not include work experience. The purpose of the study is to determine the effects of supervised work experience on the self-concept and beliefs of educationally retarded youth.

CHAPTER II

THEORY AND RELATED RESEARCH

The Phenomenal Self

The present study takes as its frame of reference the "phenomenological" or "perceptual" or "personal" view of human behavior. Self-concept theorists hold that one cannot understand and predict human behavior without knowledge of a person's conscious perceptions of his environment and of his "self" as he sees it in relation to his environment (Combs and Snygg, 1959; Rogers, 1951). Central to this view of human functioning is the concept that the basic drive of the individual is to define and enhance his phenomenal self or self-concept (Rogers, 1951). Combs and Snygg (1959) call it a striving for adequacy or an attempt to maintain and enhance the individual's experience of personal value. Rogers (1951) holds that any simple S-R type of explanation of human functioning seems almost impossible. To Rogers (1951), the mediating effect of the individual personality between S and R is obvious. Thus we may find that two persons of equal capacity and intellectual endowment may function quite differently according to their concepts of self (Walsh, 1956).

Combs and Snygg (1959) have presented the perceptual view of the dynamics of the inadequate and the adequate personality. The adequate individual is one who has achieved a high degree of need satisfaction. He reports himself to be accepted, desirable, worthwhile, and able. He is open to further perceptions because past perceptions have been positive. On the other hand, the inadequate person is unable to satisfy his important needs. He reports himself to be unwanted, unworthy, and unable (Walsh, 1956). Balester (1956) in his study of the self-concepts of delinquents, found that non-delinquents reported more positive perceptions of themselves than did first-offender delinquents and that the latter in turn possessed more positive self-concepts than persistent offenders.

Two summary statements in the work of Combs and Snygg (1959) are pertinent. They state:

> the very presumption of success is likely to make success more attainable. Positive self perceptions are conducive to further perceptions of the same order. (p. 241)

The reverse of these two statements, suggests an approximation of the lot of many of our educationally retarded youth (Baller, Charles, and Miller, 1967; Di Michael, 1966; Kalstoe and Frey, 1965). Perceptions of past failure appear to lead to further perceptions of the same order. Those who have concepts of "self as failure" are more likely to fail again in future tasks.

Negative Self-Concept

There is a wealth of research findings which document the debilitating effects of school failure on subsequent achievement of pupils and students (Raimy, 1948; Walsh, 1956; Brookover, 1962; Bruck and Bodwin, 1962). The non-graded or continuous progress elementary school represents an attempt to minimize such failure during the elementary school years (Goodlad, 1966). There is much need for research into ways by which the school may provide meaningful experiences which will bring about improvement in the self-concept or feelings of adequacy and functioning of educationally retarded adolescents. Snygg and Combs (1959) state that:

> The best guarantee we have that people will operate effectively to fulfil their own and other people's needs is that their own need for feelings of worth and value has been adequately filled in the past. (p. 264)

The home has the first major influence in self-concept development. Through interaction with father, mother, and siblings, the young child begins to define himself as bad, unable, or inadequate (Combs and Snygg, 1959; Coopersmith, 1968). The fundamental importance of these early childhood experiences in the development of adequacy of personal functioning is documented in the works of Allport (1955), the empirical studies of Bandura and Walters (1963) and the longitudinal study conducted by Baller, Charles and Miller (1967). Presence or absence of a mother figure and deviant patterns

of parental behavior appeared to be vital factors in the personality development of Ss studied by Baller et al, (1967). McCord et al, (1962) found in their study that many of the effects often thought to be a result of parental absence can be more readily attributed to interpersonal home atmosphere; deviance, rejection, and conflict.

Wylie (1961) has summarized further empirical studies bearing on the problem of parent-child interaction and negative self-concept in children. She states that: (1) childrens' self-concepts resemble the view of themselves which they attribute to their parents, (2) there is evidence that a child's level of self-regard is similar to his parents' reported level of regard for him, (3) children seem to see the same sex parents' self-concept as being more like their own, and (4) children with reported maladjustment report discrepancies between their parents' views of them. These summarized studies lend further weight to the role of the family in early self-concept development.

Havighurst (1946) has identified several life stages and suggested the significant persons who most affect the child's developing self-concept at each stage. During the second period (ages 8-16) the self-concept comes under influences outside the family. The "sub-cultures" of neighborhood, race, school, and social class become critical factors in the development of a negative concept of self (Coleman, 1961; Hollingshead, 1949; Smith, 1962). Significant

persons outside the family have a greater influence, during these years, on self-concept development of the adolescent (Baller et al, 1967).

During the second stage, which Havighurst (1946) has identified, educational experiences begin to affect the child's developing self-concept. Bloom (1965) maintains that the experiences of the first three years of elementary school are critical. If learning is not successful and satisfying, in these years, the entire educational career of the child is jeopardized. More serious is the effect of continuous failure on the child's image of himself and his attitude toward others (Williams and Cole, 1968).

Baller, Charles and Miller (1967), in their follow-up study of former mental retardates, were able to distinguish adequately and inadequately functioning adults. Those who had been unable to achieve social and vocational adjustment in adulthood also had been the products of homes in which parents had either been inadequate or non-existent. None of these people as adults could name any person who had influenced, or encouraged them.

Both "adjusted" and "unadjusted" groups were equally condemning of their experiences in school. Baller and his associates (1967) concluded that, "It is obvious that formal education of an appropriate nature is near the top of the list of needs of the mentally retarded" (p. 304). Too many of them have met school experiences which have adversely affected

their concepts of personal adequacy.

Several empirical studies related to the development and functioning of self-concept of school children and youths bear mentioning here. With reference to negative self-concept, Bodwin (1959) found a significant relationship between reading and arithmetic difficulties and "immature" self-concept. His subjects were grades three and six pupils. Raimy (1948) found that cases of non-success in therapy gave fewer expressions of positive self-regard. Walsh (1956) studied two groups of bright students; one group "underachievers," the other "achievers." She found the bright under-achievers unable to express themselves and unwilling to initiate action. They expressed feelings of rejection and isolation. These findings along with those of Fink (1962) lend credence to the theory that underachievers and school failures generally see themselves as inadequate persons.

Irrational Beliefs

Psychotherapists have reported a high degree of success in clinical practices broadly based upon the perceptual theory of human functioning (Ellis, 1962; Rogers, 1951). Ellis (1962) has evolved a theory of Rational Emotive Psychotherapy (RT) as a basis for treatment of emotionally disturbed* patients. He

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*Emotionally disturbed--patients who display persistent irrational, self-defeating, inadequate behavior.

has stated his theory in simplified form as the "ABC theory". Fundamentally Ellis (1962) holds that it is not (A) the stimulus which produces (C) the response. Rather, it is (B) the individual's unique perceptions or beliefs concerning (A) which in fact produce the behavior (C). Ellis (1962, p. 215) has stated that his theory is derived from basic phenomenolistic psychology and particularly from the works of Combs and Snygg (1959). The following quotation from Combs and Snygg (1959) illustrates the fundamental similarity of the two theories:

> What governs behavior from the point of view of the individual himself are his unique perceptions of himself and the world in which he lives, the meanings things have for him. (p. 17)

Two fundamental assumptions, one concerning the nature of man, and the other concerning the nature of emotion, underly Ellis' (1962) theory. First, he maintains that man is a uniquely rational and a uniquely irrational animal. His irrational behavior then, derives from faulty perception and/or illogical thinking. Second, human thinking and emotion are essentially and functionally the same thing. If one would change his emotions then, he must do so through cognitive or rational processes. Ellis' (1962) position concerning this second assumption, namely, the functional equality of thought and emotion finds support in the works of Cobb (1950) and Rokeach (1960).

Ellis (1962) maintains that much of the irrational component of human thinking (and emotion) derives from the individual's socialization process in the home, the school, and the wider community. When an opportunity for action or interaction presents itself at point A in the "ABC theory," the individual, on the basis of social indoctrination and/or past experience, will tell himself, "That is good for me" or "That is bad for me." It is the rational or irrational nature of statements to oneself which governs the emotion produced. Ellis (1962) stresses the fact that irrational beliefs lead to negative emotion and disturbance while rational beliefs lead to positive emotion and positive mental health. Festinger (1954) has used his model of cognitive dissonance in a similar manner to explain adequately and inadequately functioning personalities.

In RT, the therapist does not deal with all irrational ideas prevalent in our society, rather, he treats for those specifically presented by the client. Ellis (1962) has outlined eleven major irrational beliefs omnipresent in Western Society. He has also suggested more rational substitutes for each.

Beginning with Ellis' (1962) theory and more specifically his eleven irrational ideas or beliefs, Zingle (1965) prepared the Irrational Ideas Inventory as a research instrument to measure some aspects of personality functioning. Subsequently, two significant research studies have been

reported using the I-I Inventory as a measure.

Hoxter (1967) used the I-I inventory to test two groups of adolescent boys, one group, "stream-disoriented"* and the other "stream-oriented." All of the boys were culturally deprived fourteen-year-olds. He found significantly more irrational beliefs espoused by the stream disoriented group than by the control group.

Zingle (1965) utilized an RT approach to counselling underachieving high school students. He reported a positive relationship between underachievement and possession of irrational beliefs among these students. Both studies tend to substantiate Ellis' (1962) formulations.

Self-Concept of Retardates

Wattenberg and Clifford (1964) found that when intellectual ability is controlled, self-concept is a basic causal factor in determining pupil achievement levels in school. However, they found no relationship between self-concept and mental ability at the beginning of school experience. Williams and Cole (1968), however, found a significant relationship between these variables at the grade six level. They conclude that positive reinforcement consistently received by bright students and infrequently received by educationally retarded, undoubtedly affects the self-concept.

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*Stream-disoriented--Boys who were placed in more rigidly disciplined rooms following continuous atypical classroom behavior

They suggest that a negative self-concept could be significantly ameliorated by more productive school experiences.

Carroll (1967) utilizing two groups of Educable Mentally Retarded children, one group in a segregated special class and the other partially segregated, found that such class placement had a significant effect on self-concepts of participants. The segregated class indicated less improvement in self-concept than did the partially segregated class. Following the post-test, the segregated group showed a significantly higher number of derogations in the area of hopelessness, self rejection and rejection by peers than did the partially integrated group.

Porter, Collins, and McIver (1965) studied the personalities of 329 male and female fourteen-year-old Educable Mentally Retarded children enrolled in special classes. The Children's Personality Questionnaire (Porter and Cattell, 1960) was used to obtain measurements. Porter et al, (1965) found that mentally retarded boys are: emotionally immature, depressed, reserved, critical, aloof, undependable, socially bold, venturesome, impulsive, and obstructive. They found that mentally retarded girls were: excitable, impatient, unrestrained, careless, demanding, submissive, dependent and likely to ignore social standards. It is amply clear that the traits listed above are those that are characteristic of people who have negative self-concepts.

Few studies concerning self-concept of retardates

appear in the literature. Two reasons are suggested: suitable instruments for use with retardates are not always available and educators have been too ready in the past to assess ability and ignore personality dimensions of such youth. Gunnar Dybwad (1964) expressed this most cogently:

> We have in the past concentrated too much on developing classifications which denoted our preconceived notions of the retardate's limitations and then proceeded to restrict his program and his opportunity to grow in accordance with our notions. (1964, p. 155)

Vocational Experience

Baller, Charles, and Miller (1967) have identified three factors which are major contributors to the development of self-concept in retardates: (1) early experience; (2) the influence of significant others, and (3) vocational experience. The latter, vocational experience, is indeed an important factor in self-concept development (Di Michael, 1966; Baller et al, 1967). Super (1957) has stated that choice of an occupation becomes to some degree, an attempt to find fulfilment of a self-concept. Baller et al,(1967) sum up the importance of work experience to retarded youth in this way:

> In childhood and adolescence a frequent question is, "What are you going to be?" asked in an attempt to forecast future status. The adolescent or adult of limited ability and background has at least as much, if not more need for a ready and respectable answer to the question . . . . . (p. 306)

Examining the lives of the best adjusted retardates, Baller and his colleagues (1967) found that those who joined large, paternalistic organizations and stayed with the same job or those who learned a skill such as barbering or cooking and stayed became the most successful. The least successful joined small firms and moved often from job to job. The authors maintain that since, in our society, so much of social acceptability, life-satisfaction and adequate self-image derive from occupational involvement, the influence of life-work on self-concept should be studied further.

Summary

Research outlined above lends support to the theory that a positive self-concept is beneficial to a person functioning in society and that a negative self-concept is detrimental to his social and vocational functioning. Further, the studies listed suggest that negative self-concept and possession of irrational beliefs are often common factors measurable in a given personality. In human functioning, self-concept and beliefs both exert an influence at point (B) in Ellis' (1962) "ABC" theory. It is a combination of a person's beliefs (rational or irrational) about himself, and his beliefs (rational or irrational) about his environment, which best predict his reactions in society.

The environment of the student is the school and the

classroom. Studies reported in this chapter suggest that pupils and students who have met with constant failure in school and who believe themselves to be failures will be more likely to fail again in the future. Evidence is presented to support the theory that modified programs for such youth will be more likely to succeed if they are different in approach, form, and content from the regular school program.

Other studies reviewed indicate prime factors which influence the development of positive or negative self-concept. Finally, the importance of work-experience or vocational competence to the development of an adequate self-concept has been stressed. While many of the studies quoted have been designed and executed using normal rather than retarded subjects, the findings of Baller, Charles, and Miller (1967) would seem to indicate that the same road to adequacy of human functioning must be followed by the retarded.

Operational Definitions

Self-Concept: The traits and values which an individual has accepted as definitions of himself. In this study self-concept will be operationally defined as scores on the Self-Concept Scale (Lipsitt, 1958).

Irrational Beliefs: Beliefs based on faulty perception or illogical thinking. In this study irrational beliefs will be operationally defined as scores on the Irrational Ideas

Inventory (Zingle, 1965, abridged by Hoxter, 1967).

Educationally Retarded: Saskatchewan male or female students who have failed at least two grades in the past and who are enrolled in a "School-Work Training Program" or a "Vocational A" Program.

Co-operative School-Work Training Program: A program in which Saskatchewan educationally retarded youth spend part-time in school and part-time in supervised work stations in business and industry.

"Vocational A" Program: A special non-graded program consisting of classroom vocational and remedial work for students who can no longer profit from the regular school program.

Hypotheses

Hypothesis I: Students enrolled in the Co-operative School-Work Training Program (Sw) will have higher self-concept scores following work-training than will students enrolled in the first year of the "Vocational A" Program (So) which does not include work-training.

Hypothesis II: Students enrolled in the Co-operative School-Work Training Program (Sw) will have fewer irrational beliefs following work-training than will students enrolled in the first year of the "Vocational A" Program (So), which does not include work-training.

CHAPTER III

PROCEDURE

Sample

The subjects of this study were boys and girls from the public and high schools of four Saskatchewan cities; Moose Jaw, Prince Albert, Regina, and Saskatoon. The experimental group (Sw) consisted of all the students enrolled in the Co-operative School-Work Training Programs of the four cities, while the control group (So) consisted of all those enrolled in the first year of the "Vocational A" Program at Balfour Technical Collegiate. Each program represented a different treatment for students with essentially the same educational difficulties. The "Vocational A" Program (serving the total Regina Public School System) was centralized at Balfour, while the Work-Training Programs were centred in single schools in each of the cities. In each instance, the total school system of the respective city provided participants for the Work-Training Program.

Only those students who were in attendance for the pre-test in September were included in the study. Subjects who transferred to these classes after September fifteenth were excluded. Data were gathered for subsequent drop-outs from both the Sw and So groups. Tables I and II include

means of groups and means of subsequent drop-outs on the variables for which data were gathered at the time of the pre-testing in September. The variables used in the study were those commonly understood to affect personality development (Jordon, 1966).

The Sw group consisted of sixty-eight students, eight of whom dropped from school before the post-test. The So group consisted of sixty-five subjects, six of whom left school before February fifteenth. Chapter V contains a discussion of findings related to drop-outs.

TABLE I

DIFFERENCES BETWEEN MEANS ON SEVEN VARIABLES: Sw GROUP AND Sw DROPOUTS

Variable	G R O U P		
	N = 60 Sw Group	N = 8 Sw Drop-outs	Differences
Age (Mos.)	200.52	192.00	2.52
I.Q.	83.37	81.38	1.99
S.E.	11.18	8.00	3.18
No. of Gr. Failed	2.43	2.37	.06
Pre S-C	80.25	83.75	3.50
Pre I-I	146.62	146.88	.26
Sex	24 Girls 36 Boys	7 Girls 1 Boy	

TABLE II

DIFFERENCES BETWEEN MEANS ON SEVEN VARIABLES
So GROUP AND So DROPOUTS

Variable	G R O U P N = 59 So Group	N = 6 So Dropouts	Differences
Age (Mos.)	196.36	192.00	4.36
I.Q.	90.81	89.17	1.74
S.E.	10.00	8.00	2.00
No. of Gr. Failed	2.51	2.16	.45
Pre S-C	81.92	76.17	5.84
Pre I-I	150.71	151.83	1.02
Sex	23 Girls 36 Boys	2 Girls 4 Boys	

Placement in both the Work-Training and "Vocational A" Programs was on the following bases:

a) each student was over fifteen years of age.

b) each had failed at least two grades in the past and was certain to fail the grade in which he was enrolled.

c) such placement was recommended by both the principal and the educational psychologist.

Programs

In the first year of the "Vocational A" program, students have an opportunity to develop occupational and communication skills as well as to profit from remediation in reading and basic arithmetic. A core program of mathematics, science, English, and social studies is offered, however, there is much more curriculum flexibility and opportunity for teacher innovation than there is in the ordinary classroom in Saskatchewan. Boys have opportunities to develop occupational skills in the school shops while girls learn domestic skills in the Home Economics classes and basic clerical skills in the business education classrooms.

The first year of the "Vocational A" program is a totally in-school experience for students. Emphasis in all classrooms is upon developmental and remedial aspects of basic skill learning. Teachers have been carefully selected on the bases of training and experience by a very competent principal.

Students participating in the Co-operative School-Work Training Program spend part-time in school and part-time in supervised work stations in business and industry. They receive no pay for the services they render in work stations, however, employers commit themselves to providing varied and positive work experiences to trainees. As has already been indicated in Chapter I, the emphasis in work stations is not

that of learning specific job skills as much as that of developing positive personal traits and work habits.

The in-school portion of the program is intended to complement and supplement the work experience. Whenever, possible, students are allowed to register in classes which have direct application to what they will be doing in their job stations. Students receive remedial and basic skills practice in written and oral communication, arithmetic, and elementary science. Teachers are given much freedom to develop and adapt curriculum to suit the needs of individuals and groups of work-training students.

The "Vocational A" and C.S.W.T. Programs, then, are similar in their emphasis on remediation and basic subject skill development. They differ in degree of flexibility and in the degree to which they are perceived by students and parents to be different from the traditional school program.

Instruments

The following instruments were used to gather pre-test and post-test data for both the Sw and So groups.

a. S-C Scale (Lipsitt) 1958.

b. I-I Inventory (Zingle) 1965 (abridged by Hoxter) 1967.

c. S-E Index (Elley, 1961, an abridgement of the Gough 1949 Home Index Scale).

While the first two instruments were used to gather criterion variable data to test the hypotheses, the S-E Index was utilized to control for socio-economic status of the family, a factor which might have accounted for between-group variance on the two primary instruments used in this study. It is a commonly accepted fact that the incidence of school failure is much higher among students from lower socio-economic status homes (Friedenberg, 1959; 1966).

The S-C Scale

The Self-Concept Scale (Lipsett, 1958) (see Appendix A) was utilized to obtain measurements with which to test the first hypothesis. It is a twenty-two adjective check-list. Subjects are asked to rate themselves on a five-point scale; not at all, not very often, some of the time, most of the time, and all of the time, by placing an "X" in the space which best describes them. Each adjective is pre-fixed by "I am . . . . . ." Items 10, 17, and 21 are considered socially undesirable attributes and are scored 5-1, respectively, while the other items are scored on a scale of 1-5. A high total score on the Self-Concept Scale (Lipsett, 1958) is considered indicative of a healthy self-concept.

Retest reliabilities of from .73 to .91 were reported by Lipsett (1958). His subjects were grades four, five and six males and females. Measures of construct validity for the

instrument were obtained by correlating scores obtained with those of the Children's Manifest Anxiety Scale. He obtained correlations of from -.34 to -.63, all significant at the .01 level. Negative correlations indicate that there is an inverse relationship between positive self-concept and anxiety, as indicated by scores on the Children's Manifest Anxiety Scale.

Lipsitt's (1958) Self-Concept Scale was specifically chosen from among available instruments because a preliminary survey of reading ability scores of both the Sw and So groups indicated that most of the subjects of the research were two to four years retarded in reading ability. Simple directions for administration and a de-emphasis on facility in reading made it a very suitable instrument to test the first hypothesis.

Irrational Ideas Inventory

An abridgement by Hoxter (1967) of the Irrational Ideas Inventory (Zingle, 1965) was used to obtain measurements in order to test the second hypothesis of this study. (See Appendix B). The original instrument contains statements of beliefs based on Ellis' (1962) eleven Irrational Ideas.

The abridgement of the I-I Inventory used in this study is a forty-seven item instrument which measures the degree of irrationality the subject has in his beliefs.

The subject is asked to read each statement and to decide whether the answer for him is "Yes" or "No." Uncertainties are checked at the center of a five point scale. The scale is weighted 1-5 respectively for statements considered to reflect rational beliefs and 5-1 respectively for statements considered to reflect irrational beliefs. All of the statements in the inventory derive from seven of Ellis' Irrational Ideas described in Chapter II.

Using the Kuder-Richardson Formula 21, Hoxter (1967) reported a reliability co-efficient of .62 on his abridgement of the I-I Inventory, Hoxter (1967) also obtained correlations of -.50, -.65, and -.62 with the Personal Scale, Social Scale, and Total Scale respectively of the California Test of Personality. Negative correlations between scores on the two instruments reflect the fact that high scores on the California Test of Personality are indications of healthy personality, while high scores on the I-I Inventory are indicators of maladjustment.

Hoxter's (1967) abridgement was chosen over the original Zingle (1965) instrument for two practical reasons. Hoxter (1967) had already adjusted the reading level in order to use his abridgement with junior high school students whose reading levels were much below their age levels. Because of anticipated short attention span on the part of subjects (Jordon, 1966) the forty-seven item instrument was considered more appropriate than the original 122 item

inventory. Basically, Hoxter (1967, p. 16) had abridged Zingle's (1965) scale by not including items related to Irrational Ideas numbers 1, 3, 10, and 11, all of which referred more specifically to adult populations. The adjusted reading difficulty level and the deletion of items related to Irrational Ideas 1, 3, 10, and 11 made the Hoxter (1967) abridgement more useful for the groups in this study.

Socio-Economic Index

The Sw and So groups utilized in this study were from all parts of their respective cities. In order to be sure that socio-economic status was not affecting one group more than the other, the S-E Index was administered, as a control, to all subjects.

Elley (1961) designed the S-E Index (see Appendix C) as an abridgement of Gough's Home Index Scale (1949). Retest reliability of .99 and a Kuder-Richardson co-efficient of .74 are indicated from the original scale. The S-E Index has yielded correlations as high as .88 with other socio-economic scales. Subjects circle "yes" or "no" in reply to twenty questions concerning material possessions of the family. Results from the index clearly indicate that the So and Sw groups are from similar socio-economic backgrounds.

Intelligence Quotient

W.I.S.C. or W.A.I.S. full scale individual intelligence scores were obtained from the Cumulative records of

all students in both the Sw and So groups.

Age

The age in months of each individual in the Sw and So groups was obtained and recorded at the time of pre-testing in September.

Sex

The male-female composition of the Sw and So groups was recorded at the time of pre-testing.

Number of Grades Failed

Information relative to the number of grades failed in the past was recorded from the Cumulative records for each individual at the time of pre-testing.

Method

The S-C Scale, I-I Inventory and S-E Index were administered to all subjects in both the Sw and So groups the second week of September, 1967. During the third week of February, 1968, the S-C Scale and the I-I Inventory were again administered to both groups. Strict procedures were established to maintain standard times and sequences of testing between groups. Students in both the Sw and So sections were tested in groups of twenty or fewer. Every precaution was taken while students were being tested to assure privacy from fellow students and from the investigator. Verbal assurance was given by the investigator

that he would be the only one to see the completed papers and that the name pages would be destroyed following the post-testing session.

The investigator read the directions aloud while the subjects read them silently. Further, each statement on the I-I Inventory was read aloud twice, without comment, by the investigator. He then paused while the subjects noted their answers.

Analysis of Data

The statistical technique employed to test the hypotheses in this study is multiple linear regression analysis. It is a powerful method, which makes it possible to investigate the relationship between a set of predictors and a criterion. Bottenberg and Ward (1963) maintain that the old research rule, "Keep all variables constant but one" (p. VII) is not appropriate for most research problems of interest today. The technique of multiple linear regression allows the researcher to design studies taking into account all relevant factors.

In his study, Flathman (1966) has presented a clear and concise statement of multiple linear regression analysis. He states in part:

> Starting with a set of predictor variables and one criterion variable, the general procedure is to assume that the criterion can be predicted by some linear-weighted combination of the predictors. The weights used in this linear combination

are determined such that the sum of the squared errors made in predicting, is a minimum. Such a model may be used even when ones and zeros form a predictor variable.

In order to determine the efficacy of the prediction a multiple correlation co-efficient may be used since this measure is related to the amount of error involved. In order to assess the contribution of a given predictor towards predicting the criterion, the variable under study is first included in the model, then excluded, and the two squared multiple correlation co-efficients noted in each instance. The model or weighting system containing the variable is referred to as the unrestricted model while the weighting system which does not include the variable is the restricted model.

An F test (under certain assumptions) can be used to determine whether the difference in the two squared multiple correlations represents a statistically significant change. If a significant change is observed, it is attributed to the variable under study thus indicating its importance to the study. (pp. 287-288)

Following the general procedure outlined above, twelve models were utilized in this study. Models 1 and 2, 3 and 4, 5 and 6 were used to test hypothesis one, while models 7 and 8, 9 and 10, 11 and 12 were used to test the second hypothesis. In each set of models, the first represents the full model and the second the restricted model. Table III presents the models used in this study. Results derived from these calculations are reported in Tables VI and VII.

TABLE III

MODELS USED IN ANALYSIS OF DATA

Model	Criterion	Predictor	Predictor	Predictor	Predictor
1	Post S-C Scores	Group	Pre S-C Scores		
2	Post S-C Scores	___	Pre S-C Scores		
3	Post S-C Scores	Group	Pre S-C Scores	I.Q.	
4	Post S-C Scores	___	Pre S-C Scores	I.Q.	
5	Post S-C Scores	Group	Pre S-C Scores	I.Q.	Age
6	Post S-C Scores	___	Pre S-C Scores	I.Q.	Age
7	Post I-I Scores	Group	Pre I-I Scores		
8	Post I-I Scores	___	Pre I-I Scores		
9	Post I-I Scores	Group	Pre I-I Scores	I.Q.	
10	Post I-I Scores	___	Pre I-I Scores	I.Q.	
11	Post I-I Scores	Group	Pre I-I Scores	I.Q.	Age
12	Post I-I Scores	___	Pre I-I Scores	I.Q.	Age

CHAPTER IV

RESULTS

Descriptive Data

As has already been indicated in chapter three, descriptive data relative to age, sex, intelligence quotient, number of grades previously failed, socio-economic status, pre S-C scores and pre I-I scores were gathered for both the So and Sw groups.

TABLE IV

DESCRIPTIVE DATA:
DIFFERENCES BETWEEN THE So AND Sw GROUPS

Variable	Mean	Source	SS	MS	df	F	P
Age	200.56*	Groups	515.00	515.00	1	6.08	<.05
	196.36	Error	9917.00	84.76	117		
Sex	1.42*	Groups	0.003	0.00	1	0.01	0.91
	1.41	Error	28.82	0.25	117		
I.Q.	83.37*	Groups	1649.66	1649.56	1	15.45	<.01
	90.81	Error	12491.26	106.76	117		
No. of Gr. failed	2.43*	Groups	0.17	0.17	1	0.25	0.62
	2.51	Error	79.49	0.68	117		
S-E Index	11.18*	Groups	41.66	41.66	1	0.37	0.54
	10.00	Error	13006.90	117.17	117		
Pre S-C	80.25*	Groups	82.44	82.44	1	0.91	0.34
	81.92	Error	10607.94	90.67	117		
Pre I-I	146.62*	Groups	499.00	499.00	1	2.95	0.09
	150.71	Error	19802.00	169.25	117		

*Sw means are starred while So means are not.

A preliminary analysis of variance was completed to determine if there were differences between the So and Sw groups on these variables. The results reported in Table IV indicate significant differences between the groups on age and I.Q.

Selection of Predictors

Analysis of variance indicated that there were no differences between the So and Sw groups on sex, number of grades failed in the past and socio-economic status. Group, Age, intelligence quotient, and pre-treatment S-C and I-I scores were therefore selected as predictors in testing the hypotheses of this study. Table V contains correlations between predictors used in this study.

TABLE V

CORRELATIONS BETWEEN CRITERIA AND PREDICTORS

Sub-Scale	1	2	3	4	5	6	7
1 Group	1.00	-0.22	0.34	0.09	-0.08	0.16	0.24
2 Age		1.00	-0.32	0.03	0.004	-0.07	-0.15
3 I.Q.			1.00	-0.16	-0.20	-0.06	0.03
4 Pre S-C Scores				1.00	0.74	0.11	0.01
5 Post S-C Scores					1.00	-0.04	-0.07
6 Pre I-I Scores						1.00	0.32
7 Post I-I Scores							1.00

Tests of Hypotheses

Hypothesis one states that students enrolled in the School-Work Training Program will have higher self-concept scores following work experience than will students enrolled in the "Vocational A" program which does not include work experience.

A multiple linear regression analysis was completed using post-treatment self-concept scores as criterion and testing for relationships with pre-treatment self-concept scores alone, then for relationships with the optimal linear combination of pre-treatment self-concept scores and intelligence quotient and finally for relationships with the best combination of pre-treatment self-concept scores, intelligence quotient, and age.

The categorical variable, group membership, was first included in the full model and then excluded for the restricted model. Table VI indicates that group membership is significantly related to the criterion variable, since in all three predictor batteries employed, addition of group membership affected a significant increase in accountable criterion variance. Since the difference between the adjusted means was in the predicted direction, hypothesis one is supported. The Sw group had higher self-concept scores following five months in their program than did the So group.

Hypothesis two states that students enrolled in the School-Work Training Program will have fewer irrational

TABLE VI

POST-TREATMENT SELF-CONCEPT SCORES PREDICTED BY GROUP, PRE-TREATMENT S-C SCORES, INTELLIGENCE QUOTIENT, AND AGE

Predictor	Criterion	RSQ Full	RSQ Restricted	df	F	P
Group*	Post S-C scores**	0.57	0.55	1/116	5.77	<.05
Pre S-C scores						
Group*	Post S-C scores**	0.58	0.56	1/115	4.05	<.05
Pre S-C scores						
I.Q.						
Group*	Post S-C scores**	0.58	0.56	1/114	4.53	<.05
Pre S-C scores						
I.Q.						
Age						

*The categorical predictor, group membership, was first included in the full model and then excluded to provide the restricted model.

**Mean criterion scores are 83.98 for the Sw group and 82.37 for the So group, not significantly different at the .05 level.

beliefs following a work experience program than will students enrolled in a "Vocational A" program which does not include work experience.

A multiple linear regression analysis was completed using post-treatment I-I scores as criterion and testing for relationships with pre-treatment I-I scores alone, then with the optimal linear combination of pre-treatment I-I scores and intelligence quotient, and finally for relationships with the best combination of pre-treatment I-I scores, intelligence quotient, and age. The categorical variable, group membership, was first included in the full model and then excluded to form the restricted model. Table VII indicates that group membership is significantly related to the criterion variable, since in all three predictor batteries employed, addition of group membership affected a significant increase in accountable criterion variance. Hypothesis two is therefore supported. The Sw group after five months of experience in a work-training program had significantly fewer irrational beliefs than did their counterparts, the So group who had not had work experience.

TABLE VII

POST-TREATMENT I-I SCORES PREDICTED BY GROUP, PRE-TREATMENT I-I SCORES, INTELLIGENCE QUOTIENT, AND AGE

Predictor	Criterion	RSQ Full	RSQ Restricted	df	F	P
Group* Pre I-I scores	Post I-I scores**	0.14	0.10	1/116	4.75	<.05
Group* Pre I-I scores I.Q.	Post I-I scores**	0.14	0.10	1/115	4.41	<.05
Group* Pre I-I scores I.Q. Age	Post I-I scores**	0.14	0.12	1/114	3.85	=.05

*The categorical predictor, group membership, was first included in the full model and then excluded to provide the restricted.

**Mean criterion scores are 145.10 for the Sw group and 150.61 for the So group, significantly different at the .01 level.

CHAPTER V

CONCLUSIONS AND DISCUSSION

Conclusions

1. Educationally retarded youth enrolled in the Co-operative School-Work Training Program (C.S.W.T.P.) have more positive self-concepts, as measured by the S-C Scale, following five months of experience in the program than do first year "Vocational A" students, when the groups have been statistically adjusted for principal differences in pre S-C scores.

2. Educationally retarded youth enrolled in the C.S.W.T.P. have fewer irrational beliefs following such experience than do first year "Vocational A" students when the groups have been statistically adjusted for principal differences in pre I-I scores.

3. The two conclusions above are true even when significant differences with reference to age and intelligence that existed between the Sw and So groups are partialed out.

4. Drop-outs from both the Sw and So groups were similar in the number of grades previously failed. They were younger and of lower socio-economic status than those who remained in the Sw and So groups respectively.

5. Drop-outs from the Sw and So groups differed with reference to sex. Seven of eight who left the Sw group were female while only two of six drop-outs from the So group were female.

6. Drop-outs from the So group had poorer initial self-concepts and were more irrational in their beliefs than were those who remained in the So group.

7. Drop-outs from the Sw group, compared to the total Sw group, had more positive self-concepts initially and expressed a similar degree of irrationality in their beliefs.

Discussion

The first two conclusions will be discussed together because both represent subject self-ratings concerning personal frames of reference and beliefs. Theory and research outlined in Chapter II suggest that many of a person's beliefs and hence his actions, are stereotyped according to previous experiences in his environment and society. His self-concept is also a product of past experiences and past evaluations by self and others. Failure and success as critical factors in self-concept development have also been reviewed.

Participants in the C.S.W.T.P. had met more failure during the years they attended school than did most students. This fact is documented in the cumulative records as well as indicated in initial scores on

both the S-C Scale and I-I Inventory. All had failed two grades previously and some had failed as many as four grades. All were expected by their teachers to fail during the year in which they were selected for work-training. Prior to work-training, the school experience of the Sw group may have been destructive of the individual's self-concept of personal worth.

Whether participation in the C.S.W.T.P. is the only reason for the demonstrated improvement in self-concept and beliefs is not known. However, it seems reasonable to surmise that the distinguishing characteristics of the program contributed to the improvement. First, the program was different from traditional schooling in that students spent part-time and often half-time in work stations outside of the regular school. Second, competition was removed in that the employer-trainer was fostering individual growth rather than attempting to earn economic return from the trainee. Third, because of their age, desire for independence and proximity to the time when they must seek full-time employment, job training was viewed by members of the Sw group as very desirable. Indeed, teachers who worked with these youth in the school portion of the program have presented subjective reports (Sigfusson, 1967) which indicate more global, positive, personality changes and changes in attitude and functioning than could be measured by instruments used in this study.

It is evident that on the pre-test, the mean S-C score was lower for the Sw than the So group, while on the

post-test in February the order was reversed, with the Sw group then having the higher mean S-C score. The mean self-concept score for the So group remained almost stable, changing only .46 from $1.92 to $2.37. The change, however, was in a positive direction. The mean I-I score did not change from pre-test to post-test for the So group, while it was significantly lower for the Sw post-test. Perhaps this means that opportunities were available in work stations for members of the Sw group to re-examine some of the stereotyped beliefs which they had previously held.

The So group did not change in mean self-concept or espoused irrational beliefs. Their background of failure and success in school was comparable to that of the Sw group. They were significantly younger and more intelligent in terms of W.I.S.C. and W.A.I.S. scores than were members of the Sw group. In predicting post-scores, however, these differences were considered and adjustments made for them. The researcher feels that the "Vocational A" program, even though it was a modified program, and staffed by specially selected teachers, was less effective in providing opportunities for self-concept modification than was the C.S.W.T.P. Perhaps in the minds of the So group, the "Vocational A" program was too closely identified with the regular school program in which they had met little success.

Data concerning drop-outs from the Sw and So groups provide interesting insights. While the total number of drop-outs from each group is too small for statistical comparisons of mean scores, interesting differences exist. Drop-outs were younger than those who stayed, 192 months compared with 196 and 200 months for the So and Sw total groups respectively. They also scored lower (8) on the Socio-Economic Index compared with ten and eleven for those who stayed.

Most of the drop-outs from the Sw group were females. This might reflect a condition of fewer work-training stations available for girls. The fact that all the male participants but one remained in the program is an indication of the suitability of the program even for the older student. On the other hand, four times as many males as females dropped from the "Vocational A" program.

Data generated by the S-C scale pre-test indicate that Sw drop-outs had more positive self-concept scores than did those who remained in the Sw group, (83.75 compared with 80.25). The converse is true of So drop-outs. Those who left had a mean pre-test S-C score of 76.17 compared with 81.91 for those who remained. These scores indicate that Ss with more inadequate self-concepts dropped from the So group, while those with more adequate self-concepts dropped from the Sw group. Because of the fact that Sw drop-outs were mostly females, such a

comparison may not be meaningful.

Limitations

The crudeness of the primary measuring instruments, the S-C Scale and the I-I Inventory, constitutes a limitation to the present study. While the validity and the reliability of the instruments are adequate, they can be said to measure some aspects only, of self-concept and irrational beliefs. Granted the crudeness of the tests, however, the investigator feels that, in terms of the results obtained, had more adequate measuring instruments been available the results would have been more markedly in the direction already indicated in the present study. In other words, the crudeness of the scales used tends to lend credence to the results obtained.

A second limitation derives from the fact that only one instrument was administered to measure self-concept. A second measure of self-concept might have provided added credence to the results. The same may be said of the I-I Inventory and measurements of beliefs.

The present study was completed for Sw from the public elementary and public collegiate systems only. This imposes some limitations on the degree to which generalization is possible from the findings in that separate school Sw and So groups might report themselves differently. Their experiences in the separate school

systems may tend to either foster or limit the development of positive self-concepts and rational beliefs.

A further limitation to the study arises from the fact that it was not possible to provide for random assignment of subjects to the Sw and So groups. Both groups, however, had identical entrance criteria to their respective programs and did not have significantly different mean scores on the S-C Scale, the I-I Inventory, and the S-E Index pre-tests.

Implications for Educational Practice

Both Hypotheses advanced in this study were supported. If, indeed, self-concept or beliefs concerning self, are personality factors which govern individual functioning in the home, the school, and later in career and adult life, then the results of this research, along with the findings of the studies reviewed,* have the following important implications for education.

1. The Co-operative School-Work Training Program (C.S.W.T.P.) should be extended to a greater number of our educationally retarded youth. It appears to offer the best preparation for life presently available for educable retardates and slow learners.

2. Modified programs such as the "Vocational A" program should be broadened to include work-training, even at the first year level.

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*Some of the implications presented arise from the research reviewed rather than directly from the findings of this study.

3. The initial year is probably the most important one for any student in a modified program. He will be more susceptible to personality change when the program is new to him than he will be in subsequent years.

4. If school systems are to provide meaningful programs for educationally retarded youth they will have to seek individual assessments beyond mental ability, age, and past failures. Objective measures of self-concept, personality, and beliefs may provide more meaningful bases for adequate special program planning.

5. Provision of competent, professional guidance and counselling services for educationally retarded youth in special programs should be given priority. These young people require access to such services more than do the average student. Evidence of continuous self-defeating behavior is ample. Opportunities for the modification of such behavior exist in the counselling relationship.

6. Teacher personality and competence are vital factors to the success of special programs for educationally retarded youth. Unless a climate of mutual respect exists, it is unlikely that such youth will make progress toward personality change and modification of functioning. Staff should be chosen on the basis of proven capacity to establish rapport with such youth.

7. From the very beginning, parents should be made aware of the objectives of the program and encouraged to

lend their support and assistance to their sons and daughters.

8. Interesting and varied work-placements must be found for girls participating in the C.S.W.T.P. Because females are expected to become home-makers, and temporary workers, priority has sometimes been given to finding work-stations for male participants.

9. The school and work-experience portions of the C.S.W.T.P. should be co-ordinated as fully as possible. This implies that some staff member should be given time and primary responsibility to work jointly with teachers and trainer-employers so that the total experience of the participant is positive and cumulative. Where possible, this task should be assigned to professional guidance counsellors, if they are available in the school systems.

10. Ample opportunity should be provided on a planned basis for staff discussion and consultation. Such discussion should not be limited to those who are directly associated with the program, but rather, should be extended to the total school staff. Integration of special class students into the sports and extra-curricular activities of the school is to be encouraged.

11. Whenever possible, C.S.W.T. Programs and "Vocational A" Programs for students such as those encompassed by the present study should be housed in Division IV

schools or high schools. When such programs are housed in elementary schools, age differences between regular pupils and special class participants serve as a continual reminder of past failure and inadequacy. Educationally retarded youth belong with their age peers. This factor alone may contribute to more positive self-perceptions.

Suggestions for Further Research

1. The present study examines student personality changes resulting from participation in the C.S.W.T.P. Since the program is now nearing the end of its third year of operation, there is need for short and longer term follow-up studies to determine the degree of success presently being enjoyed by former C.S.W.T.P. participants who are now in full-time employment. Such studies might utilize control groups composed of special class students who did not receive work-training.

2. There is an apparent need to develop and standardize more comprehensive instruments for measuring self-concepts of educationally retarded youth. The need is more pronounced for educable retarded youth. To some extent, further development and refinement as opposed to growth of the C.S.W.T.P. awaits more precise personality assessment tools. Reading difficulty levels and ease of communication must be prime considerations in the development of such measures.

3. There is need also, for more research into attitude development and factors affecting attitude change on the part of educationally retarded youth. As has been indicated in Chapter II, attitudes, beliefs, and self-concept may provide more basic clues to understanding adequacy of human functioning than do traditional intelligence quotient ratings. Such research would have direct implications for program modifications.

4. There is need for research to indicate the most appropriate type of teacher to be assigned to the C.S.W.T.P. More specifically, we must attempt to determine the best combination of age, experience, professional training and personality which will prepare teachers to be effective with educationally retarded youth who are enrolled in the Co-operative School-Work Training Program.

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A P P E N D E X A

SELF-CONCEPT SCALE

SELF-CONCEPT SCALE

Last Name First Name City

Fall _____ Winter _____ School _____

This is a study of how young people feel about themselves. Often the way you feel about yourself affects the way you get along in school and in life. Sometimes the courses you take affect the way you feel about yourself. We need to know how much a person knows about himself. This is not an intelligence test. This is not a school test. How much do you know about yourself? In telling us how much you know about yourself you will be helping us to provide better courses for all young people.

The best answer to each statement is your first impression - there are no right or wrong answers.

INSTRUCTIONS FOR MARKING ANSWERS

For each statement, decide which one of the choices your answer will be. There are five choices - Not at All, Not Very Often, Some of the Time, Most of the Time, and All of the Time. Put an (X) in the place on the line that tells best how you feel about yourself.

Think carefully, but do not spend too much time on any one question. Let your <u>own</u> personal experience or opinion help you to choose the answer <u>you feel</u> about each statement. There are no right or wrong answers. Please mark every item.

	Not at All	Not Very Often	Some of the Time	Most of the Time	All of the Time
1. I am friendly	_____	_____	_____	_____	_____
2. I am happy	_____	_____	_____	_____	_____
3. I am kind	_____	_____	_____	_____	_____
4. I am brave	_____	_____	_____	_____	_____
5. I am honest	_____	_____	_____	_____	_____
6. I am likeable	_____	_____	_____	_____	_____
7. I am trusted	_____	_____	_____	_____	_____
8. I am good	_____	_____	_____	_____	_____
9. I am proud	_____	_____	_____	_____	_____
10. I am lazy	_____	_____	_____	_____	_____
11. I am loyal	_____	_____	_____	_____	_____
12. I am co-operative	_____	_____	_____	_____	_____
13. I am cheerful	_____	_____	_____	_____	_____
14. I am thoughtful	_____	_____	_____	_____	_____
15. I am popular	_____	_____	_____	_____	_____
16. I am courteous	_____	_____	_____	_____	_____
17. I am jealous	_____	_____	_____	_____	_____
18. I am obedient	_____	_____	_____	_____	_____
19. I am polite	_____	_____	_____	_____	_____
20. I am bashful	_____	_____	_____	_____	_____
21. I am clean	_____	_____	_____	_____	_____
22. I am helpful	_____	_____	_____	_____	_____

A P P E N D I X B

IRRATIONAL IDEAS INVENTORY

IRRATIONAL IDEAS INVENTORY

Last Name First Name City

This is a study of events and experiences in every day life. You are asked to co-operate seriously and carefully in marking the items in this booklet. This is not an intelligence test. The best answer to each statement is your own first impression - there are no right or wrong answers.

Your answers will be treated with the strictest confidence and in no case will they be used to cause you any embarrassment.

INSTRUCTIONS FOR MARKING ANSWERS

For each statement, decide whether your answer is "Yes" or "No". If your statement is a definite "Yes" put an (X) on the end of the line where the "Yes" is typed. If your answer is a definite "No" put an (X) on the end of the line nearest the "No." If you are not sure as to how you feel about the statement mark an (X) on the middle of the line. If the true answer is somewhere between the "Yes" and "No," put the (X) where it is most true for you.

Think carefully but do not spend too much time on any one question. Let your <u>own</u> personal experience or opinion guide you to choose the answer <u>you feel</u> about each statement. There is no time limit. Please mark every item.

1. It is better to tell your troubles to your friends than to keep them to yourself.	Yes		?		No
2. When I don't like my teacher, I accept her anyway and do the best I can.	Yes		?		No
3. It is foolish to let others see how you feel.	Yes		?		No
4. If I have a choice between important school work or fun, I usually don't do the school work.	Yes		?		No
5. I worry about little things.	Yes		?		No
6. It is impossible at any given time to change one's feelings.	Yes		?		No
7. I sometimes worry about my health.	Yes		?		No
8. If someone insults me or hurts my feelings, I cannot help it if I call him a bad name or hit him.	Yes		?		No
9. I think I am getting a square deal in life.					
10. Boys and girls should not be punished for cutting classes, or for being truant.	Yes		?		No
11. It is useless to worry about things that cannot be changed or corrected.	Yes		?		No
12. If I get some bad marks on a report card, I stop trying and I lose interest in school.	Yes		?		No
13. I prefer to have someone with me when I receive bad news.	Yes		?		No
14. When I do not win a race, or I don't get a good mark in school I feel very upset.	Yes		?		No
15. Some children are dull because of poor training at home and poor schooling.	Yes		?		No

16. Because winning is the most important thing, I do not enjoy playing on the losing side.

Yes ? No

17. It is right not to forgive our enemies.

Yes ? No

18. Teachers, counsellors, and parents know better about what courses pupils should take than the Pupils themselves.

Yes ? No

19. If you are rich you will be happy at home.

Yes ? No

20. It is okay to drop out of school or quit early if your parents did not graduate.

Yes ? No

21. I worry over possible things going wrong.

Yes ? No

22. When people make fun of me or the way I look it does not bother me.

Yes ? No

23. I have sometimes crossed the street to avoid meeting some person.

Yes ? No

24. If a person's mother or father is dead or not living with the family, the children will not grow up to have a good life.

Yes ? No

25. The boy who is usually not good in school is often a great success after leaving school.

Yes ? No

26. I break school rules because the pupils did not help to make them.

Yes ? No

27. Sometimes I am troubled by thoughts of death.

Yes ? No

28. If I were able to do so I would attend some other school than the one I am now attending.

Yes ? No

29. I get terribly upset and miserable when things are not the way I would like them to be.

Yes ? No

30. I worry about what happens after you die.

Yes ? No

31. I get very angry when I miss a bus which passes only a few feet away from me.

Yes ? No

32. A person who will not stand up for his rights as a teenager will probably not be able to stand up for his rights as an adult.

Yes ? No

33. Crime never pays.

Yes ? No

34. I feel that life has a great deal more happiness than trouble.

Yes ? No

35. When things are not the way I would like them to be, and I cannot change them, I calmly accept things the way they are.

Yes ? No

36. A juvenile delinquent will almost surely be a criminal when he becomes an adult.

Yes ? No

37. Many of my classmates are so unkind or unfriendly that I avoid them.

Yes ? No

38. I like to do things that people think are right.

Yes ? No

39. If a child is brought up in a home where there is much quarrelling and unhappiness he will probably be unhappy in his own marriage.

Yes ? No

40. If a person tried hard enough, he can be first in anything.

Yes ? No

41. I worry about the possibility of an atomic bomb attack by another country.

Yes ? No

42. I often spend more time in trying to think of ways of getting out of doing something than it would take me to do it.

Yes ? No

43. When a person is no longer interested in doing his best he is becoming useless.

Yes ? No

44. I am happiest when I am sitting around doing little or nothing.

Yes ? No

45. To work together is better than to work against each other.

Yes ? No

46. People who are not perfect in doing at least one thing are worthless.

Yes ? No

47. Most people can be very good in at least doing one thing well.

Yes ? No

A P P E N D I X C

SOCIO-ECONOMIC INDEX

SOCIO-ECONOMIC INDEX

Last Name First Name City

Fall _____ Winter _____ School _____

In the following questions, mark your answer by putting a circle in the right place. For example, in the question Does your family have a car?" draw a circle around the "Yes" if your family does have a car, and around "No" if it does not. Be sure to answer all questions.

1. Does your family have a car? . . . . . Yes No
2. Does your family have a garage or carport? . . . Yes No
3. Did your father go to high school? . . . . . Yes No
4. Did your mother go to high school? . . . . . Yes No
5. Did your father go to college? . . . . . Yes No
6. Did your mother go to college? . . . . . Yes No
7. Is there a desk in your home? . . . . . Yes No
8. Does your family have a Hi-Fi or record player? . . Yes No
9. Does your family have a piano? . . . . . Yes No
10. Does your family get a daily newspaper? . . . . Yes No
11. Do you have your own room at home? . . . . . Yes No
12. Does your family own its home? . . . . . Yes No
13. Is there a set of encylopedias in your home? . . . Yes No
14. Does your family have more than 100 hard-cover books? (4 shelves - 3 feet long) . . . . . Yes No
15. Did your parents borrow any books from the library in the last year? . . . . . Yes No
16. Does your family leave town at least once a year for a holiday? . . . . . Yes No
17. Do you belong to any club where you have to pay fees? Yes No
18. Does your mother belong to any clubs or orgainzations such as study, church, art, or social clubs? . . Yes No
19. Does your father belong to any such clubs or organizations? . . . . . Yes No
20. Have you ever had lessons in music, dancing, art, swimming, and so on, outside of school? . . . Yes No

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